ILLINOIS COMMERCE COMMISSION

DOCKET NO. 07-0532

DIRECT TESTIMONY

OF

HERMAN L. SEEDORF

SUBMITTED ON BEHALF OF

WRB REFINING LLC

FEBRUARY 21, 2008

Q. Please state your name, business address and position with ConocoPhillips Company.

A. My name is Herman L. Seedorf. My business address is Wood River Refinery, Roxana, IL 62084. I am employed by ConocoPhillips Company. My current title is Refinery Manager, Wood River Refinery. I am also Vice President of WRB Refining LLC, which owns the Wood River Refinery.

Q. What are your responsibilities at the Wood River Refinery?

A. I am responsible for the safety of the 1,400 employees and contractors that are on the site everyday, as well as the operation of our 306,000 barrels per day refinery (crude oil).

Q. What is your educational background?

A. I attended the U.S. Naval Academy and graduated with a degree in mechanical engineering in 1973. I then entered the U.S. Navy's nuclear power program and served as a naval officer on the strategic missile submarine, the U.S.S. Casimir Pulaski, until 1978. I returned to school at Cornell University and received an M.B.A. with a concentration in finance in 1980.

Q. What is your professional and business experience?

A. Upon completion of my M.B.A, I began my oil industry career with Exxon International in 1980, buying and selling international crude oils. In 1984, I

transferred to Exxon Company U.S.A.'s Baytown, Texas, Refinery where I held supervisory positions in operations, engineering, and refinery economics. This was followed by a headquarters assignment in Houston where I served as the supply coordinator for the delivery of Exxon's transportation fuels throughout the West Coast of the United States. In 1990, I transferred to Exxon's Bayway, New Jersey, refinery as engineering manager. When Tosco acquired the Bayway Refinery in 1993, I became the technical director for the refinery, and was later named refinery manager in 1997. I was the refinery manager at the Bayway, New Jersey, refinery under both Tosco and Phillips 66 prior to transferring to the Wood River Refinery in August of 2002, concurrent with the ConocoPhillips merger.

Q. For clarification, could you please describe the relationship between ConocoPhillips Company and WRB Refining LLC?

A. ConocoPhillips Company and Encana have entered into a venture comprised of two 50/50 operating partnerships, one Canadian upstream partnership and one US downstream partnership. The downstream partnership, WRB Refining LLC, consists of ConocoPhillips' Wood River and Borger refineries, located in Roxana, Illinois, and Borger, Texas, respectively. ConocoPhillips is the operator and managing partner of the downstream partnership.

(This description came from our press release and I prefer to keep it as close as possible to our official description.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to support Ameren's application for a Certificate of Convenience and Necessity to build two new 138 kV transmission lines to feed the Wood River Refinery. These lines are necessary to support the continuing safe operation of the refinery, as well as an expansion of the refinery planed for 2009.

Q. Do you have any objections to the routing of the lines proposed by Ameren?

A. No. We have no objections to the routing which is located on our property.

Q. Have you entered into a Construction Agreement with Ameren for these facilities?

A. Yes. The Construction Agreement requires WRB Refining LLC to pay for these facilities in their entirety preventing any adverse financial consequences for Ameren or its customers.

Q. Please describe the operations of a refinery.

A. On a fundamental level, refineries heat up and cool down large volumes of hydrocarbons and distill them into distinct products. The refinery accomplishes this heating and cooling process through furnaces, cooling towers and heat exchangers.

Q. How is electricity used in the refinery?

A. The refinery uses electric motors to pump crude oil into crude units, intermediary products to other units for further processing and finished products to storage tanks. Electricity is also used to compress gaseous streams such as hydrogen and other

refinery gases to units which crack, reform, and de-sulphurize various intermediates into finished refinery products. Electricity is used to power fans and water circulation systems to cool finished products to a safe temperature for storage. All refinery processes require power for either pumping of liquid or compression of gaseous substances or air.

Q. Why is electric power reliability important to a refinery?

A. These refinery processes are designed to take place at a steady state for the safest operation of the refinery. When we make process changes, such as changing from our summer to winter product slates, we make these changes gradually in order to avoid process upsets and equipment damage. When we bring units down for maintenance, we use a practiced protocol for controlled shut-down.

Abrupt changes in operating conditions, such as a total refinery electrical outage, creates an emergency condition forcing the refinery into an uncontrolled shut-down. It can take 7 – 10 days to recover and restart the refinery after such an event. We have experienced 5 total refinery electrical failures and 5 major partial refinery electrical failures in the last 10 years.

During such failures, the refinery relies on emergency shutdown systems, pressure relief protection and emergency flares to function properly. The installation of the new 138 kV transmission lines will help minimize the use of the emergency shutdown procedures.

Q. Please describe WRB Refining LLC's interest in the captioned cause.

A. WRB Refining LLC is proposing to invest in a multi-billion dollar project at the Wood River refinery. This investment will increase the refinery's capacity to 360,000 barrels of crude oil per day and we will increase the number of employees and contractors in the refinery by by 5-10%. We have named this project the CORE project.

The CORE project will dramatically increase the refinery's power needs from approximately 140 MW to around 240 MW. Once the CORE project is completed, WRB is considering a second phase of expansion which will, if approved, further increase the refinery's electrical demand to approximately 300 MW, and the refining capacity to 400,000 barrels of crude oil per day.

Q. Has the refinery had electric power reliability issues recently?

A. Yes, the refinery has suffered issues of electric reliability over the last several years due to our low voltage delivery system. Some of these issues stem from the use of wooden electrical distribution poles. The wind storm in July 2006, followed by the ice storm in December 2006 has increased concerns about the vulnerability of wooden poles.

The refinery uses wooden electric poles to support the wires which distribute electricity through the various processing units inside the facility. The refinery lost

many wooden poles during the severe weather events of 2006. The two new 138 kV feeds on steel structures would dramatically increase the reliability of refinery operations.

Q. Are you making improvements to your electrical system inside the refinery?

Yes. To further emphasize the importance of electric reliability at a large refinery, WRB Refining LLC is spending over $100 million to improve the internal electrical system inside the refinery. We are planning two new substations to receive high-voltage power from Ameren. We are also planning a new high voltage loop inside the refinery to connect the substations which will significantly increase the reliability of our own electrical facilities.

Q. Are the current voltage feeds appropriate to satisfy the electrical demands of the Wood River Refinery.

A. No. The seven different low voltage feeds to the refinery are inappropriate for the continued safe operation of a refinery as large as ours.

Q. How do the multiple low voltage feeds at the Wood River Refinery compare to other ConocoPhillips refineries?

A. ConocoPhillips has 13 refineries. The Wood River Refinery has the largest electric demand in the ConocoPhillips refinery fleet. I know of no other cases in any other state where such a large load is served at low voltage via wooden poles.

As I stated above, WRB Refining LLC is planning to spend over $100 million to increase the reliability of our own electric distribution facilities inside the refinery. This investment will not be a good one if the reliability of our power service is not also increased. Ameren's current application, if approved by this Commission, will accomplish this increase in reliability that we need for the continued safe operation of the refinery, as well as the additional delivery capacity necessary to serve our expanded refinery.

Q. Does this conclude your testimony?

A. Yes, it does.